

Applicants: Tatjana Dragic and William C. Olson  
Serial No.: 10/086,814  
Filed : February 28, 2002  
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9 and extending therefrom in the amino terminal direction;

wherein  $\beta$  represents from 0 to 14 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction;

wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group;

wherein all of  $\alpha$ , Y, D, I, N, Y, Y, T, S and  $\beta$  are joined together by peptide bonds;

further provided that at least two tyrosines in the compound are sulfated (SEQ ID NO: 3-14).--

#### REMARKS

The April 3, 2002 Notice To File Missing Parts stated that the applicant failed to comply with the requirements of 37 C.F.R. §§1.821 - 1.825. The Notice also stated that applicants must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disk copy of the "Sequence Listing", as well as an amendment directing its entry into the application. Finally, the Notice stated that the applicants must submit a statement that the content of the sequence listing information in the computer readable form is identical to the written (on paper or compact disk) sequence listing and, where applicable, includes no new matter, as required by 37 C.F.R. §§1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.821(d).

In response, applicants submit a paper copy of the Sequence

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Listing attached hereto as **Exhibit D** in compliance with the requirements of 37 C.F.R. §1.824. In addition applicants submit herewith a computer readable form (CRF) copy of the "Sequence Listing" attached hereto as **Exhibit E** as required by 37 C.F.R. §1.825(d). Further, applicants submit herewith as **Exhibit F** a Statement in Accordance with 37 C.F.R. §1.821(f), certifying that the initial computer readable form containing the nucleic acid and/or amino acid sequences as required by 37 C.F.R. §1.821(e) contains the same information which was submitted as the "Sequence Listing". The attached sequence listing does not contain any new matter.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorneys invite the Examiner to telephone at the number provided below.

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A fee of \$720.00 for a Four Month Extension is due. A check including this amount is, as noted above, included with the Communication In Response To April 3, 2002 Notice To File Missing Parts Of Application filed under separate cover on the same date as the amendment. If any additional fees are required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

*Mark A. Farley*

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

*Mark A. Farley* 10-3-02

John P. White Date  
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## Exhibit B

In the specification:

Please replace the paragraph on page 5 lines 1-26 with the following paragraph:

### Summary of the Invention

This invention provides a compound comprising the structure:



wherein each T represents a threonine, each S represents a serine, each Y represents a tyrosine; each D represents an aspartic acid, each I represents an isoleucine; and each N represents an asparagine; wherein  $\alpha$  represents from 0 to 9 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the I at position 9 and extending therefrom in the amino terminal direction; wherein  $\beta$  represents from 0 to 14 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction; wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group; wherein all of  $\alpha, Y, D, I, N, Y, Y, T, S$  and  $\beta$  are joined together by peptide bonds; further provided that at least two tyrosines in the compound are sulfate (SEQ ID NO: 3-14).

Please replace the paragraph which begins on page 5 line 28 and ends on page 6 line 23 with the following paragraph:

This invention also provides a compound comprising the structure:



wherein each T represents a threonine, each S represents a serine, each Y represents a tyrosine; each D represents an aspartic acid, each I represents an isoleucine; and each N represents an asparagine; wherein  $\alpha$  represents from 0 to 9 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the I at position 9 and extending therefrom in the amino terminal direction; wherein  $\beta$  represents from 0 to 334 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction;

wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group; wherein all of  $\alpha$ , Y, D, I, N, Y, Y, T, S and  $\beta$  are joined together by peptide bonds; further provided that at least two tyrosines in the compound are sulfated (SEQ ID NO:15-26).

Please replace the paragraph on page 18 lines 11-17 with the following paragraph:

**Fig. 6 CCR5 Nt peptide sequences and labels**

The primary sequence of each peptide is indicated in the left column and the corresponding label is indicated in the right column. Sulfated tyrosine residues are designated by black boxes and white boxes designate phosphorylated tyrosine residues (SEQ ID NO: 27-38).

Please replace the paragraph on page 21 lines 3-27 with the following paragraph:

This invention provides a compound comprising the structure:



wherein each T represents a threonine, each S represents a serine, each Y represents a tyrosine; each D represents an aspartic acid, each I represents an isoleucine; and each N represents an asparagine; wherein  $\alpha$  represents from 0 to 9 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the I at position 9 and extending therefrom in the amino terminal direction; wherein  $\beta$  represents from 0 to 14 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction;

wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group; wherein all of  $\alpha$ , Y, D, I, N, Y, Y, T, S and  $\beta$  are joined together by peptide bonds; further provided that at least two tyrosines in the compound are sulfated (SEQ ID NO: 3-14).

Please replace the paragraph which begins on page 23 line 13 and ends on page 24 line 7 with the following paragraph:

This invention also provides a compound comprising the structure:



wherein each Y represents a tyrosine; each D represents an aspartic acid, each I represents an isoleucine; and each N

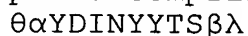
represents an asparagine; wherein  $\alpha$  represents from 0 to 9 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the I at position 9 and extending therefrom in the amino terminal direction; wherein  $\beta$  represents from 0 to 334 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction; wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group; wherein all of  $\alpha$ , Y, D, I, N, Y, Y, T, S and  $\beta$  are joined together by peptide bonds; further provided that at least two tyrosines in the compound are sulfated (SEQ ID NO: 15-26).

### Exhibit C

#### In the claims:

Please amend claim 1 as indicated below.

--1. A compound comprising the structure:



wherein each Y represents a tyrosine; each D represents an aspartic acid, each I represents an isoleucine; and each N represents an asparagine; wherein  $\alpha$  represents from 0 to 9 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the I at position 9 and extending therefrom in the amino terminal direction;

wherein  $\beta$  represents from 0 to 14 amino acids, with the proviso that if there are more than 2 amino acids, they are joined by peptide bonds in consecutive order and have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the E at position 18 and extending therefrom in the carboxy terminal direction;

wherein  $\theta$  represents an amino group or an acetylated amino group; wherein  $\lambda$  represents a carboxyl group or an amidated carboxyl group;

wherein all of  $\alpha, Y, D, I, N, Y, Y, T, S$  and  $\beta$  are joined together by peptide bonds;

further provided that at least two tyrosines in the compound are sulfated (SEQ ID NO: 3-14).--